

# Watering Facility For Livestock

*Alabama Guide Sheet No. AL 614*



## Definition

A watering trough or tank used as a container to provide drinking water for livestock.

## General Information

### Location

If possible, locate the trough so that cattle will not have to walk more than 800 feet to water. If located on a fence line, a trough can supply water for two pastures. Select a site with good drainage. More than one trough may be needed in a large pasture to better distribute the grazing. Avoid wet or boggy areas. In locations subject to prolonged freezing conditions, freeze-proof troughs should be considered. Concrete troughs can be partially buried to help prevent freezing.

### Trough Materials

The watering trough or tank can be made of reinforced concrete, 20 gauge or thicker galvanized steel, or approved plastic. If made of concrete, the sides are to be at least 3 inches thick and the bottom 4 inches thick. Welded wire reinforcement shall be at least 8 gauge. Manufactured freeze-proof troughs or portable troughs may be used.

### Trough Capacity

The trough should be sized with enough capacity to meet the livestock requirements. As a general rule, the trough should hold enough water to provide from 50 to 100 percent of the cattle needs for the day.

When cattle do not have to walk more than 800 feet to water, they will go to water singly; therefore, smaller troughs can be used. A freeze-proof trough with two holes will serve 150 head of cattle (according to one manufacturer).

### Plumbing

The water supply line shall have at least 1 1/4 inch diameter for gravity flow systems and 3/4 inch for pressurized systems. The trough should have an overflow pipe to control the water level and to remove excess flow safely from the watering location. Any floating valve or other mechanism should be protected from damage by the cattle. A drain plug is needed in the trough for maintenance.

### Heavy Use Area Protection

The area around the trough for at least 10 feet should be protected from the heavy use of the cattle and sloped to prevent holding water. The preferred protective surface consists of a geotextile (fabric) material overlaid with at least 6 inches of gravel (crusher run). If concrete is used, a thickness of at least 4 inches is required. The surface of the concrete should be roughened to prevent cattle from slipping. Heavy use area protection is not necessary where vegetation is maintained around portable troughs.

## Operation and Maintenance

Maintenance should be performed to keep the trough clean and debris removed. Algae growth may need to be controlled.

## References

NRCS AL Conservation Practice Standards:  
Code 614 - Watering Facility  
Code 561 - Heavy Use Area Protection

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